PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference PG 06187WO | FOR FURTHER ACTION | See Form PCT/IPEA/416 | |
|--|--|---|---------------|
| International application No. | International filing date (day/r | (month/year) Priority date (day/month/year) | |
| PCT/EP2004/014022 | 09.12.2004 | 22.12.2003 | |
| International Patent Classification (IPC) or nation | onal classification and IPC | 1 | |
| F16D33/06 | | | |
| Applicant VOITH TURBO GMBH & CO |). KG | | |
| This report is the international prelin under Article 35 and transmitted to the | | ablished by this International Preliminary Examinie 36. | ng Authority |
| 2. This REPORT consists of a total of _ | 4 | sheets, including this cover sheet. | |
| 3. This report is also accompanied by Al | NNEXES, comprising: | | |
| a. (sent to the applicant and | to the International Bureau) a | total of 3 sheets, as | follows: |
| | | which have been amended and are the basis for this Authority (see Rule 70.16 and Section 607 of the Authority (see Rule 70.16). | |
| 1 1 1 | | his Authority considers contain an amendment that filed, as indicated in item 4 of Box No. I and the S | |
| | Bureau only) a total of (indicate | e type and number of electronic carrier(s)) | |
| _ ` | ,, | , containing a sequence listing a | and/or tables |
| related thereto, in computer Section 802 of the Administr | • | tted in the Supplemental Box Relating to Sequence | |
| 4. This report contains indications relating | ng to the following items: | | |
| Box No. I Basis of the | report | | |
| Box No. II Priority | | | |
| Box No. III Non-establis | shment of opinion with regard t | to novelty, inventive step and industrial applicability | y |
| Box No. IV Lack of unit | y of invention | | |
| BON 110. 1 | atement under Article 35(2) wi explanations supporting such | ith regard to novelty, inventive step or industrial app statement | licability; |
| Box No. VI Certain docu | ments cited | | |
| Box No. VII Certain defe | cts in the international applicat | tion | |
| Box No. VIII Certain obse | rvations on the international ap | pplication | |
| Date of submission of the demand Date of completion of this report | | | |
| | | | |
| Name and mailing address of the IPEA/EP | Authori | ized officer | |
| Facsimile No | Telepho | one No. | |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/014022

| Вох | No. I | | Basis of the report | | | |
|-----|---------------|----------------------|---|------------------------------------|-----------|-------------------------------|
| 1. | | | to the language, this report is based on the internation der this item. | nal application in the language in | which it | was filed, unless otherwise |
| | | | eport is based on translations from the original language is the language of a translation furnished for the purpo | | | , |
| | | | international search (Rule 12.3 and 23.1(b)) | | | |
| | | \bigsqcup_{i} | publication of the international application (Rule 12.4) |) | | |
| | | L i | international preliminary examination (Rule 55.2 and/ | or 55.3) | | |
| 2. | recei | iving Oj report): | to the elements of the international application, this fixe in response to an invitation under Article 14 are ernational application as originally filed/furnished | | | |
| | \boxtimes | the de | scription: | | | |
| | | pages | 1,3-8 | | | as originally filed/furnished |
| | | pages* | | | | .2005 with |
| | | pages* | k | received by this Authority on | | |
| | \boxtimes | the cla | | | | |
| | | nos. | | | | as originally filed/furnished |
| | | nos.* | | | r with an | |
| | | nos.* | 1-8 | | 01.02 | .2006 with letter |
| | | nos.* | | | | _ |
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| | | | awings: | | | 11 61 16 1 |
| | | sheets | | | | |
| | | sheets | | | | · |
| | $\overline{}$ | sheets | | | | |
| | 닏 | a sequ | ence listing and/or any related table(s) – see Supplement | ental Box Relating to Sequence L | isting. | |
| 3. | | The ar | nendments have resulted in the cancellation of: | | | |
| | | | the description, pages | | | |
| | | | the claims, nos. | | | |
| | | | the drawings, sheets/figs | | | |
| | | | the sequence listing (specify): | | | |
| | | | any table(s) related to sequence listing (specify): | | | |
| 4. | | | eport has been established as if (some of) the amend ave been considered to go beyond the disclosure as fil | | | |
| | | | the description, pages | | | |
| | | | the claims, nos. | | | |
| | | | the drawings, sheets/figs | | | |
| | | | the sequence listing (specify): | | | |
| | | | | | | |
| * | If ite | т 4 арр | olies, some or all of those sheets may be marked "supe | | | |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/014022

| Box | No. V | | der Article 35(2) with regard to novelons supporting such statement | ty, inventive step or industrial applicability; | |
|-----|---------------|-------------------------|---|---|------|
| 1. | Statement | | | | |
| | Novelty (| (N) | laims 1-8 | | YES |
| | | | | | _ NO |
| | Inventive | step (IS) | aims 1-8 | | YES |
| | | | | | |
| | Industria | l applicability (IA) | _{laims} 1-8 | | YES |
| | | | | | |
| 2. | Citations and | l explanations (Rule 70 | | | |
| 2. | 1. | | makes reference t | o the following | |
| | ⊥• | document: | makes reference c | o the lollowing | |
| | | document. | | | |
| | | D1: GB-A- | 424 704 (FRANCATS | E DU FERODO SA) 11 | |
| | | | ry 1976 (1976-02-1 | · | |
| | | ICDI | Iy 1970 (1970 02 1 | | |
| | 2. | D1. which | s considered to be | the closest prior | |
| | | | ses (see figure 3) | _ | |
| | | | _ | ct matter of claim 1 | |
| | | differs in | _ | | |
| | | | | | |
| | | - the c | annels are provide | d in the drive shaft, | |
| | | | | , | |
| | | - the at | least one supply c | hannel and the at | |
| | | least one | vacuation channel | extend at least | |
| | | across a p | edetermined sectio | n in the axial | |
| | | direction | n the drive shaft, | the at least one | |
| | | evacuation | channel being situ | ated on a larger | |
| | | perimeter | n relation to the | at least one supply | |
| | | channel, a | d | | |
| | | | | | |
| | | - the su | ply channel is in | the form of a central | |

working medium channel on the longitudinal axis of

novelty and inventive step.

| INTE | PCT/EP2004/014022 | | | |
|-----------|---|--|--|--|
| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | |
| | the drive shaft from the axial end of the drive | | | |
| | shaft, which is remote from the working chamber, | | | |
| | up to at least approximately the other end of the | | | |
| | drive shaft and is surrounded by a plurality of | | | |
| | evacuation channels which are situated radially | | | |
| | outside thereof. | | | |
| 3. | The subject matter of claim 1 is therefore novel (PCT Article 33(2)). | | | |
| 4. | The problem to be solved by the present invention can therefore be regarded as that of providing | | | |
| | better and simpler sealing between the supplying | | | |
| | and evacuation of medium. | | | |
| 4.1. | The solution proposed in claim 1 of the present | | | |
| | application involves an inventive step for the | | | |
| | following reasons (PCT Article 33(3)): | | | |
| | sealing between the channels can be carried out in | | | |
| | an especially simple manner owing to the fact that | | | |
| | only one seal is necessary for all the channels. | | | |
| 5. | Claims 2 to 8 are dependent on claim 1 and | | | |
| | therefore also meet the PCT requirements for | | | |
| | | | | |